

What is claimed is:

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1. A method, in a cellular communication system, for automatic selection of an encryption algorithm for use in a base transceiver station, comprising the steps of:

5 extracting, from network information, a region code representative of the geographic jurisdiction in which the base transceiver station resides;

searching an encryption algorithm database for a code matching the region code; and

10 if a match is found, then applying an encryption algorithm associated with the region code in the encryption database.

2. A method according to claim 1, wherein the step of extracting, from network information, a region code representative of the geographic jurisdiction in which the base transceiver station resides comprises:

15 retrieving the region code from system information stored in a memory module.

3. A method according to claim 1, wherein:

20 the network information is stored in a memory associated with a first network element and the encryption algorithm database is stored in a second network element.

4. A method according to claim 1, further comprising the step of:
25 encrypting information using the selected encryption algorithm.

5. A method, in a cellular communication network for automatic selection of an encryption algorithm for use in one or more base transceiver stations located in a cell, comprising the steps of:

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receiving, at a base station controller, a signal indicating that the base transceiver station is being initialized;

in response to the signal, retrieving a mobile country code from system information stored in a memory associated with the base station controller;

5 retrieving, from a database stored in a memory associated with the base station controller, an encryption algorithm selection code associated with the mobile country code;

transmitting the encryption algorithm selection code to at least one base transceiver station in the cell;

10 selecting, at the base transceiver station, an encryption algorithm corresponding to the encryption algorithm selection code for use when communicating between the base transceiver station and a remote terminal.

6. A method according to claim 5, further comprising the step of:
15 encrypting information using the selected encryption algorithm.

7. A method, in a cellular communication network that operates in accordance with GSM standards, for automatic selection of an encryption algorithm for use in one or more base transceiver stations located in a cell, comprising the steps of:

20 receiving, at a mobile services switching center, a signal indicating that the base transceiver station is being initialized;

in response to the signal, retrieving a mobile country code from system information stored in a memory associated with the mobile services switching center;

25 retrieving, from a database stored in a memory associated with the mobile services switching center, an encryption algorithm selection code associated with the mobile country code;

transmitting the encryption algorithm selection code to at least one base

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transceiver station in the cell;

selecting, at the base transceiver station, an encryption algorithm corresponding to the encryption algorithm selection code for use when communicating between the base transceiver station and a remote terminal.

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8. A method according to claim 7, wherein the step of transmitting the encryption algorithm to at least one base transceiver station comprises:

transmitting the encryption algorithm from a mobile services switching center to a base station controller; and

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transmitting the encryption algorithm from a base station controller to a base transceiver station.

9. A method according to claim 7, further comprising the step of: encrypting information using the selected encryption algorithm.

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10. A network node for use in a cellular communication network, comprising: a communication interface;

a processor;

a memory module, operatively associated with the processor;

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operating software, residing in the memory module, comprising a code that indicates the country in which the base station controller resides; and

an encryption algorithm database stored in the memory module, the encryption algorithm database including codes representative of specific geographic regions and encryption algorithm codes indicating encryption algorithms authorized in the geographic region.

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11. A network node according to claim 10, wherein: the network node comprises a base transceiver station.

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12. A network node according to claim 10, wherein:
the network node comprises a base station controller.
13. A network node according to claim 10, wherein:
the network node comprises a mobile services switching center.
14. A cellular communication network, comprising:
a network node comprising
a memory module for storing operating software, the operating
software including a code indicating the country in which the base station controller
resides, and an encryption algorithm database including country codes and
associated codes indicating authorized encryption algorithms, and
a processor for retrieving the country code from the operating system
software, searching the encryption algorithm database for an encryption algorithm
code associated with the country code, and transmitting a signal representative of
the encryption algorithm code to the base transceiver station; and
a base transceiver station including an encryption module adapted to select
one of at least two different encryption algorithms in response to the signal received
from the base station controller.
15. A cellular communication network according to claim 14, wherein:
the network node comprises a base transceiver station.
16. A cellular communication network according to claim 14, wherein:
the network node comprises a base station controller.
17. A cellular communication network according to claim 14, wherein:
the network node comprises a mobile services switching center.